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Subject: Environmental Defense comments on Asphalt, Sulfonated, Sodium salt (CAS# 68201-32-1)

(Submitted via Internet 9/14/04 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, lucierg@msn.com and Santav@cpchem.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Asphalt, Sulfonated, Sodium salt (CAS# 68201-32-1).

The test plan and robust summaries for asphalt, sulfonated sodium salt (SAS) were prepared by Chevron Phillips Chemical Company. The test plan states that SAS is used solely as an additive for drilling fluids to reduce torque and drag in drilling operations. Under normal conditions of use, the sponsor states that no asphalt fumes are emitted because high temperatures are only encountered in aqueous solutions. However, no information is provided on release of SAS constituents into water during drilling operations.

SAS is apparently comprised of hundreds of constituents, yet the test plan provides only very limited and generalized composition data. We recommend that the revised test plan include a table which identifies all substances normally present in SAS at concentrations of greater than 1%. Without this kind of information it is difficult to assess the adequacy of the test plan.

The sponsor proposes to use surrogate data from a number of substances in the test plan. Those substances include sulphonic acid petroleum salts, naphthenic acids and asphalt. However, use of the surrogate data is poorly justified, the vast majority of the surrogate data is not presented in the robust summaries and sufficient composition data on the surrogate mixtures are also not presented. Our preliminary evaluation of the limited compositional data indicates that the mixtures are not sufficiently similar in composition to justify category formation. Therefore, we recommend that the proposed surrogate data not be used in fulfillment of HPV requirements. This should not pose a major problem or significantly alter the test plan for the following reasons:

1. Data on physicochemical endpoints for SAS are available with the exception of water solubility, and the sponsor has already proposed a water solubility study on SAS.
2. Data are already available for environmental fate and pathway endpoints.
3. Data are already available for SAS on the three ecotoxicity endpoints.
4. Acute mammalian toxicity data are available on SAS from an oral study. This study seems sufficient to meet HPV requirements, so the surrogate data on inhalation and dermal exposures, although helpful, are not needed.
5. The sponsor has proposed a combined repeat dose/reproductive/developmental study on SAS, so although no data exist on these endpoints,

the HPV requirements can be met by the proposed study. However, if the sponsor can better justify the use of the surrogate data, we agree that they might be helpful in evaluating the results of the proposed combined study.

6. There are no available studies on the genetic toxicity of SAS, and the sponsor proposes to conduct an Ames test. We agree with this proposal but we also recommend that a chromosomal aberration or micronucleus study also be conducted.

Thank you for this opportunity to comment.

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